

## **ABSTRACT**

*In this era of industrial revolution 4.0, market globalization has influenced trading behavior which always tries to meet consumer needs. Likewise, micro, small and medium enterprises (MSMEs) must also be able to follow market developments in order to survive and increase the market. Problems that are often faced by MSMEs include the lack of efficient economic growth caused by the lack of application of information technology in MSME operations.*

*A business activity carried out by retail MSME actors cannot be separated from what is called buying and selling or transactions. Problems that often occur in sales at MSMEs are recording sales data which is still manual, the way sales transactions are sometimes still primitive, and also making sales reports that are still manual. The trigger for these problems in general is the lack of an application to manage sales because it requires more budget to use applications or information technology that suits the company's needs because there are still many expenses for other needs that are more important to support the business. One of the solutions offered to trigger this problem is to implement the shared service concept.*

*The results of this study is a Sales Application for MSMEs that implement the shared service concept, where MSME parties can use this application as a platform to manage their sales units without incurring additional costs or resources to establish their own sales applications. Shared Service itself is a consolidation or a business model that allows existing resources or resources to share usage by integrating and centralizing operational activities in all divisions. This application also applies the Waterfall development method which allows systematic work and facilitates project control, and also allows appropriate and timely development stages.*

*This sales application for MSMEs will be formed in website-based products to be used quickly, practically, and efficiently. This application will be built using the JavaScript programming language, more focused on storing data into the MongoDB database, the ReactJS library at the frontend layer, and at the backend layer using NodeJS and Express. The results of this study were also tested with*

*the Blackbox testing method, UAT (User Acceptance Test), and also Load Testing where the test results will be used to determine the level of system functional evaluation, and also the level of acceptance from the user.*

*The results of this study are expected to later be able to assist the operations of MSME actors, especially those engaged in sales or retail according to the results of system testing carried out in the Verification Phase, in Blackbox testing it was found that all application system features were running as expected, and also on User evaluation. Acceptance Test obtained a percentage value of 90% on the question of application usability to respondent MSMEs, which according to the Likert Scale Criteria Table can be categorized as strongly agree that this application helps in operationally managing sales at MSMEs.*

**Keywords— MSME, sales , Shared Service ,Website, Waterfall, JavaScript**